

Fig. 1

Schematic view of a preferred apparatus used in producing nonwoven spacer fabric according to present invention

Fabric
Cross Sections
with and without
filling materials

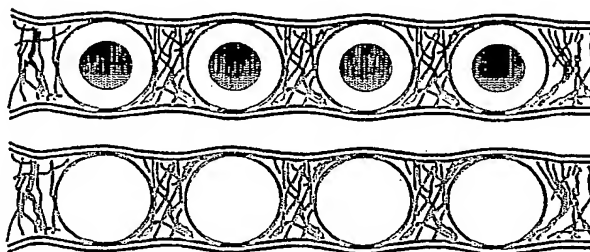


Fig. 2

Schematic cross-section of a typical spacer fabric produced according to claim 1

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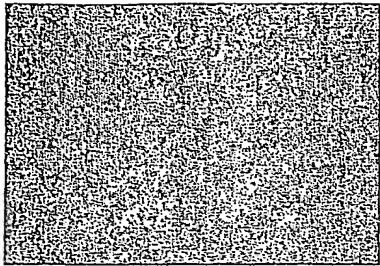


Fig. 3

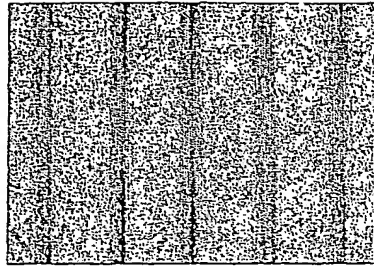


Fig. 4

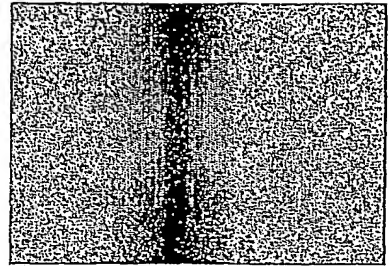


Fig. 5

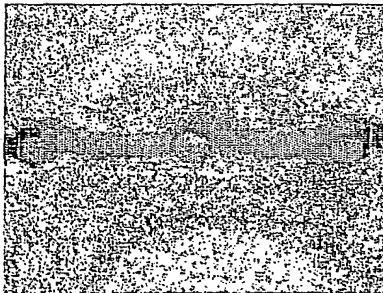


Fig. 6

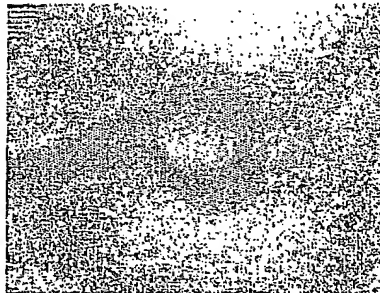


Fig. 7

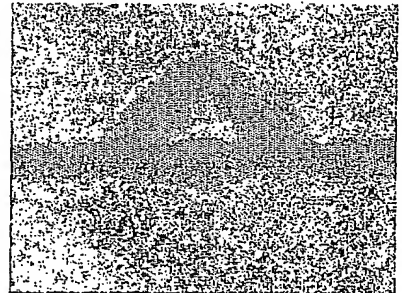


Fig. 8

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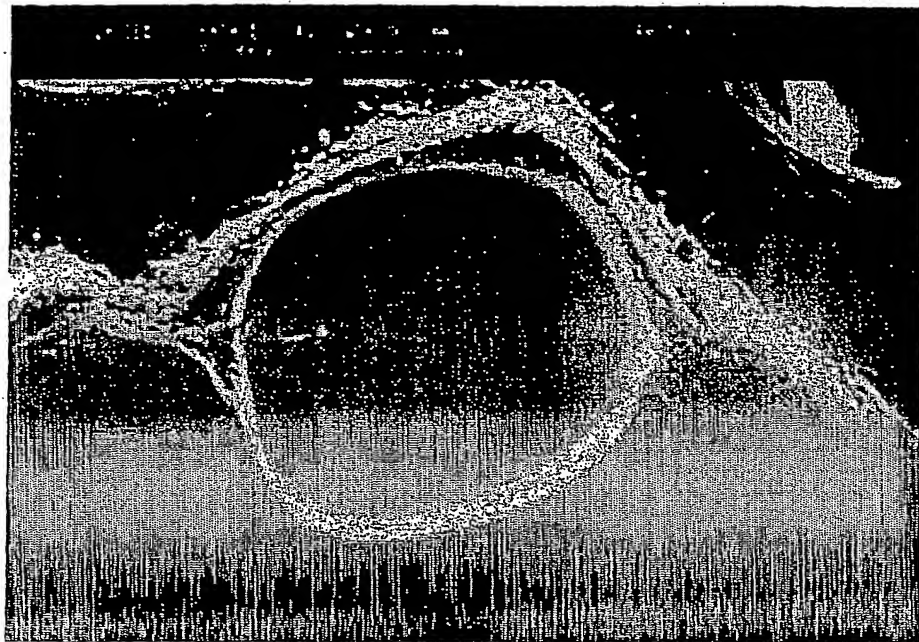


Fig. 9

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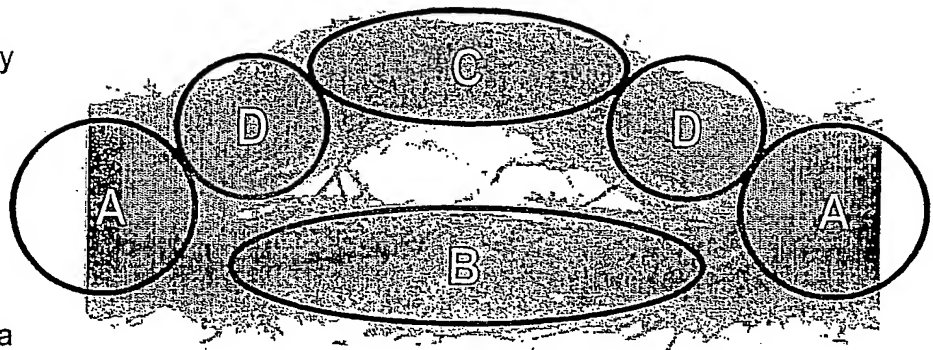
Heterogeneous:
orientation, porosity
and permeability vary
in the fabric

A = Inter-cavity area

B = Base layer (in
contact with
the forming belt)

C = Upper cover area

D = Corner area



When jet impact is from one side:-
Permeability in area: $D > C > B > A$

Fig. 10

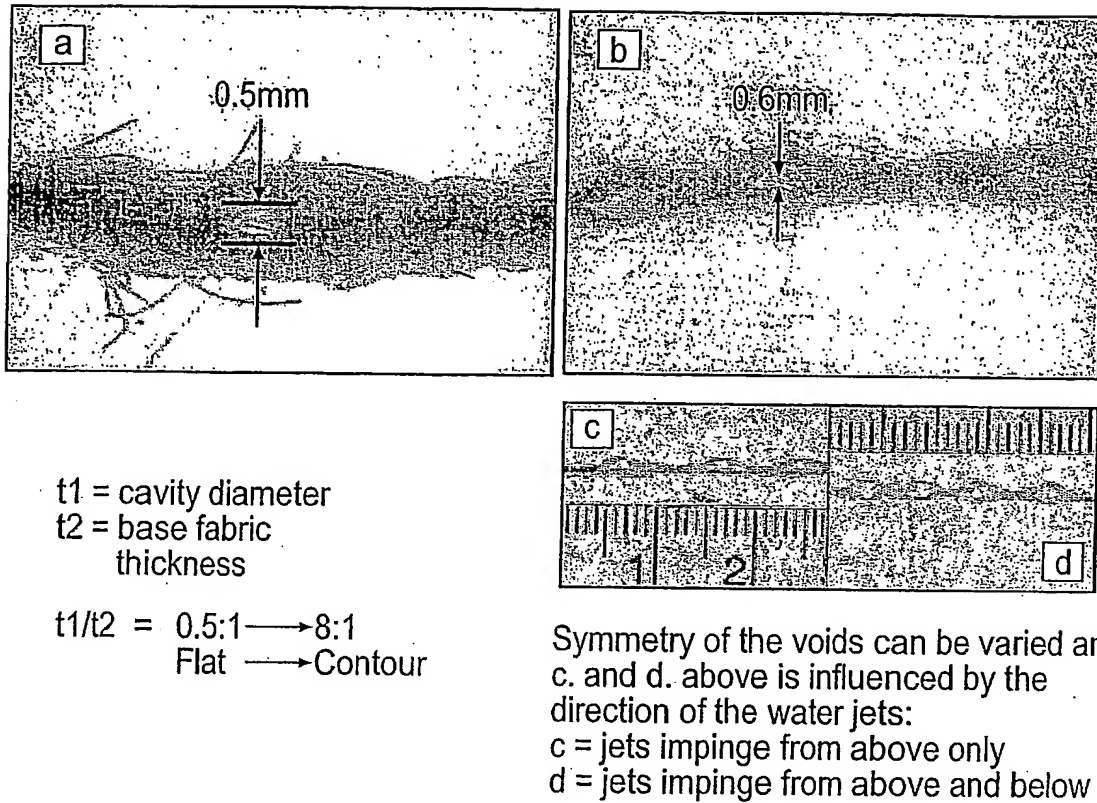


Fig. 11